

**NORMALIZATION OF DEFECTIVE T CELL RESPONSIVENESS THROUGH
MANIPULATION OF THYMIC REGENERATION**

ABSTRACT

The present disclosure provides methods for the treatment and potential alleviation of
5 autoimmune diseases and allergies in a patient. This is accomplished by deleting at least most of
the existing T cell population and reactivating the thymus. Optionally, hematopoietic stem cells,
autologous, syngeneic, allogeneic or xenogeneic, are delivered to increase the speed of
regeneration of the patient's immune system and to supply normal T cells to the patient or to
replace existing aberrant T cells. In some embodiments, the hematopoietic stem cells are
10 CD34+. The patient's thymus is reactivated by disruption of sex steroid mediated signaling to
the thymus. In some embodiments, this disruption is created by administration of LHRH
agonists, LHRH antagonists, anti-LHRH receptor antibodies, anti-LHRH vaccines or
combinations thereof.